IN THE CLAIMS:

Please amend the claims to read as set forth below in the Listing of Claims:

Claims 1-47 (Cancelled)

E2

Claim 48. (Currently amended) A method of producing an immune response in an animal comprising, administering to said animal, an effective amount of an antigenic composition, comprising an adjuvant and an isolated *Chlamydia* species high molecular weight (HMW) protein, said HMW protein encoded by a nucleic acid comprising nucleotide residues 466 to 3417 of SEQ ID NO.: 1, ~~residues 82 to 3036 of SEQ ID NO.: 23 or residues 85 to 3039 of SEQ ID NO.: 24~~, wherein the *Chlamydia* species is *Chlamydia trachomatis, Chlamydia pecorum, or Chlamydia pneumoniae.*

Claim 49. (Currently Amended) The method of claim 48, wherein said HMW protein comprises an amino acid sequence of amino acid residues 29 to 1012 of SEQ ID NO.: 2, ~~residues 29 to 1013 of SEQ ID NO.: 15 or residues 29 to 1013 of SEQ ID NO.: 16~~.

Claim 50. (Previously Added) The method of claim 48, wherein said HMW protein is obtained using plasmid pAH342 obtainable from *E.coli* BL21 (pAH342) assigned ATCC accession number 98538.

Claim 51. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, said HMW protein encoded by a nucleic acid comprising a nucleotide sequence of SEQ ID NO.: 1, ~~23 or 24~~, wherein the *Chlamydia* species is *Chlamydia trachomatis, Chlamydia pecorum, ~~Chlamydia psittaci~~ or Chlamydia pneumoniae.*

Claim 52. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, wherein said HMW protein comprises an amino acid sequence of SEQ ID NO.: 2, ~~15 or 16~~.

Claim 53. (Previously Added) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, wherein said HMW protein is obtained using plasmid pJJ701 obtainable from *E.coli* AR58 (pJJ701) assigned ATCC accession number PTA-4123.

E2 cont.

Claim 54. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* ~~species~~ *trachomatis, C. pecorum or C. pneumoniae* HMW protein, wherein said HMW protein is encoded by a nucleic acid having a nucleotide sequence which hybridizes under conditions comprising 50% formamide and 37°C ~~or 0.15 M NaCl and 70°C~~ to a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO.: 1~~, 23 or 24, or a sequence complementary thereto~~ from residue 382 to residue 3417, and which HMW protein is recognized by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID NO.: 2~~, 15 or 16~~.

Claim 55. (Previously Added) The method of claim 48-54, wherein said composition is formulated as a microparticle, a capsule, a liposome preparation or an emulsion.

Claim 56. (Previously Added) The method of Claim 51-54, wherein said animal is a mammal or a bird.

Claim 57. (Previously Added) The method of Claim 51-54, wherein said composition further comprises an adjuvant